

MIKE RADFORD, PE

Education

MS – Environmental Engineering, University of Central Florida, 2009

BS – Environmental Engineering, University of Central Florida, 2008

Professional Licenses

Professional Engineer – Florida # 80079, Pennsylvania # 083705

Specialty Certifications

GCI-ICP Certified Geosynthetic Liner Inspector, License No. 634-16

American Concrete Institute Concrete Transportation Construction Inspector

FDOT QC Manager

FDOT Advanced MOT

FDOT Final Estimates I/II

ACI Concrete Field Testing Technician I

FDOT Earthwork I

FDEP Stormwater, Erosion, and Sedimentation Control Inspector

OSHA 10-hour – Construction

Professional Affiliations

Solid Waste Association of North America (SWANA)

Professional Experience

Mr. Radford is a licensed Professional Engineer with over 10 years of experience in various civil/environmental, landfill/solid waste design, stormwater, and field inspection projects. As a Senior Project Professional at SCS, Mr. Radford has managed design and construction on various methane gas management systems, drainage improvements, landfill closures, and financial assurance analyses.

Codina Methane Gas Management System (MGMS) Buildings A-F, 2019-Present.

Project Manager and Engineer of Record for the design and construction oversight of six warehouse buildings constructed over a lakefill in Hialeah, FL. The design work consists of a geomembrane liner barrier system with geovents, pipe headers, and vent riser pipes installed along the east, west, and south sides of the buildings for passive venting of lakefill gases under the building. The project also consists of the certification of an Engineering Control Plan for the green areas and outparcels of the site. This establishes a minimum barrier between the extent of the existing contaminated soil and the final grade.



SCS ENGINEERS**Sole Mia NE 146th Street Drainage Improvements, 2019-Present**

Engineer of Record for the stormwater improvements on a roadway Improvements project in south Florida, near Miami Beach. The high groundwater table and limited space required French drain/exfiltration trenches and a deep injection well in order to meet the required 10-year storm peak stage. This design required permit applications for South Florida Water Management District (SFWMD), FDEP, and DERM. The project is set to go into construction in mid-2020.

FPL Wolfson Right of Way Improvements

Engineer of Record for the street, sidewalk, and stormwater improvements at FPL Wolfson. Design included addition of widened road, sidewalk, French drain, and inlets.

Hillsborough County, Southeast County Landfill (SCLF) Phase II Rain Tarp Construction Project

Senior Project Professional assisting with the design of a 36-acre temporary cover above existing intermediate fill. The design requires the existing sod to be removed, with intermediate or structural fill to be graded to promote stormwater runoff to the perimeter ditches.

New Hanover County Landfill, Stormwater Master Plan Modification, 2019

Senior Project Professional creating the design of a stormwater modification at New Hanover County Landfill. The Work consisted of the re-routing of stormwater runoff from an offsite discharge point to discharge into a Borrow Pit Pond after passing through two "bio-ditch" treatment cells with sunshine vetiver grass for erosion control and nutrient uptake. The site was also modified to include a site access road and 100-year storm offsite discharge.

Waste Management, Monarch Hill Landfill Site Plan and Stormwater Management System Modifications, 2019-2020

Engineer of Record for the ERP Modification resulting from the base grade redesign of cells 9-11. This includes calculation of peak stages and offsite discharge during the 25-year and 100-year storms, as well as overall stormwater routing design.

Waste Management, Lateral Expansion, Ft. Meade Landfill, 2019-2020

Engineer of Record for the ERP resulting from the lateral expansion of the landfill. This includes calculation of peak stages and offsite discharge during the 25-year and 100-year storms, as well as overall stormwater routing design. The work also required wetlands mitigation and environmental/endangered species (completed by others).

SMART Used Auto Parts, Medley, FL, 2019-2020

Engineer of Record updating site/stormwater plan to verify that the site holds the 10-year storm on site. Site work and testing included new topographical survey and stormwater structure data collection, percolation testing for exfiltration trenches, and CCTV inspection to verify the condition of the existing system to determine if improvements should be made. Results of the site assessment and modeling will determine what drainage improvements are proposed (if any).

Orange County, Florida, FY19 Financial Responsibility Cost Estimates.

Senior Project Professional providing project management and engineering support services for the Florida Department of Environmental Protection 2019 Financial Responsibility Cost Estimates for the Orange County Solid Waste Facility. The project included a complete financial update to a Class I, Cell A-K, Class I Cell 7B/8, and Class III Cell I and inflation updates to Class I, Cell 9-12. The project also included working with the Counties financial model to project airspace usage for each cell until closure.

SCS ENGINEERS**Orange County, Florida, 2019 Cell 7B/8 Lift Station Retrofit:**

Engineer of Record for the Cell 7B/8 Lift Station repair. This project includes calculating the total dynamic head curve of the existing pump, assist with designing a proposed retrofit of the lift station, and performed miscellaneous tasks to complete the design and bidding process for the project.

Hollywood Stormwater Design for Ground Storage Tank, Seminole Tribe of Florida, 2017: Project Engineer designing grading plan and evaluating retention pond stage-storage and capacity for various storm events. Also, prepared permit applications through South Florida Water Management District (SFWMD). Used the SFWMD ERP Manual and ICPR4 to design pond and drainage.

Hattiesburg Wastewater Treatment Plant Characteristics and Cost Analysis, 2014: Responsible for the design of leachate storage facility/pump station adjacent to the East Laurel Pump Station. Background for this work included calculations & technical memorandums, cost estimates, and preparation of AutoCAD plans. Wrote additional technical memorandums on the technologies being proposed for the wastewater treatment plant with strict effluent Phosphorous and Nitrogen requirements. The Biological Nutrient Reduction technologies analyzed included Oxidation Ditch, Step-feed, and Bardenpho designs. Also assisted in capital costs and O&M cost analysis for each proposed Biological Nutrient Reduction technology.

Tomoka Farms Road Landfill Administration Building, Port Orange, FL, 2018: CQA for project involving construction of a new administration building, completed in two phases. This building project included two new wet detention ponds, 1,900 square foot septic tank system and drain field, parking area and sidewalk, curb & gutter, new water main, and landscaping with irrigation systems.

Orange County Cell 9-12 Class I Landfill Phase I Sequential Closure, Orange County, Florida, 2016: On-site Project Engineer for the landfill gas, condensate, and air supply pipe systems installation and testing phase of the closure project. This includes oversight of trenching, pipe welding, pressure testing, and tying-in of the old landfill gas system to the newly installed system. Continuous coordination with Engineer-of-Record, Contractor, Client, and Landfill Gas-to-Energy personnel for plant shutdowns during landfill gas tie-ins.

Tomoka Farms Road Landfill North Cell Phase II Expansion Area 3, Volusia County, Florida, 2014: Assisted with shop drawing reviews, and daily field support as Site Engineer for a 2-month period during geosynthetics installation.

CDF Slurry Wall Landfill Phase V Side Slope Closure Construction, Brevard County, Florida, 2015: On-site Project Engineer for Brevard County Florida CDF Slurry Wall Landfill Phase V Side Slope Closure construction project. The closure cover Work includes site preparation and grading of the existing side slopes, preparation of the sub-base and installation of the leveling course, barrier layer, drainage layer, protective cover and sod. Responsible for overseeing construction, completing in-field Contractor and Installer certification documentation, drilling reports, GCL/geomembrane/subsurface acceptability reports, well construction logs, and various QA testing documentation as well as frequent communication with Contractor(s) and Installer(s). Also responsible for writing Neel-Schaffer project-specific Health and Safety Plan.

Town of Lady Lake Utility Building Stormwater and Sanitary Sewer/Wet Well Design & Permitting, 2018: Project Engineer designing and evaluating retention pond stage-storage and capacity for various storm events, as well as designing grading plan. Also prepared permit applications through St. Johns River Water Management District. Designed and permitted sanitary sewer gravity, force main, and wet well through FDEP.

Comanche Peak Flood Reevaluation – Glen Rose, Texas, 2013: Assisted with flood-reevaluation calculation package using HEC-RAS, GIS, and HEC-HMS software for calculating water level due to local intense precipitation.

SCS ENGINEERS

FDOT MUTCD Curve Project, 2018: Project Coordinator for the 5-year statewide FDOT curve assessment and signing project. Coordinating with data collection teams, subconsultants, and production staff. This project involved design and QC of over of over 1000 ramp and curve signage plans.

Sanford Hidden Lake Drainage Study, 2018: Senior Engineer for this neighborhood drainage improvements project involving the modeling of various storm events through ICPR, and proposing culvert improvements and cost estimates for the Hidden Lake neighborhood.

U.S. 192 Decorative Street Lighting, Construction Engineering Inspection, City of West Melbourne, 2017: Project Administrator providing daily on site CQA services for the installation of new City-owned and maintained decorative Light Emitting Diode (LED) street lighting along U.S. 192 from Columbia Lane to Pearl Street. Responsibilities include oversight of construction, MOT plans, AGI32 lighting modeling and FDOT permitting.

City of Sanford Hidden Lake Drive & Live Oak Boulevard Sidewalk Design, 2018: Project Manager/Project Engineer for the construction of 10,000 feet of new sidewalk. The project included construction plans, specifications, opinion of probable costs, public meetings, and construction bidding services. Challenges for this project included irregular existing drainage design, right-of-way, and utility conflicts.

Villages Elementary Safe Routes to School Sidewalk Local Agency Program (LAP) Project Inspection, Town of Lady Lake, Florida, 2017: Project Administrator/CQA Inspector for FDOT Local Agency Project involving 4000 feet of new sidewalk, curb and gutter, and new inlet structures/stormwater piping. Managed construction, communication with Contractor, Client, Engineer of Record, and FDOT.

Rolling Acres Recreational Site Golf Driving Range and Parking Lot, Lady Lake, FL, 2017: Construction oversight and shop drawing review for a new asphalt paved parking lot and sidewalk at the Rolling Acres Driving Range. This included construction of new inlet structures and drainage pipe to an adjacent retention pond.

Guava Street Sports Complex Concession Building Project, Town of Lady Lake, FL, 2017: Project Engineer and On-Site Representative for new 2,045 one-story concession building. Also evaluated drainage of parking lot and adjacent proposed building and provided construction administration, permitting, and inspection.

Sanford Zoo/FEMA Drainage Study, 2018: Senior Engineer for the drainage improvements project. The property had experienced flooding problems at buildings and animal cages during Hurricane Irma. Work involved modeling various storm events through ICPR with existing conditions, and proposed conditions involving culvert improvements and increased elevation of the access road in order to better protect the property from flooding in the future.

Stage 1 Study - Hobson Grove Landfill, 2018: Senior Engineer for the Stage 1 characterization report of the inactive Hobson Grove Landfill. The Stage 1 studies are preliminary characterizations of the historical landfill sites that form the first step in evaluating these sites so that remediation can be planned and implemented.

Site Plan Review, Town of Lady Lake, FL, 2014: Senior Engineer responsible for review of site plans for compliance of the Town's Land Development Regulations. The site plan reviews consist of a list of detailed items emphasizing proposed water and waste water lines, drainage and storm water, construction details, environmental protection, and permit or evidence of application for a permit

Orange City – E. Graves, S. Orange Drainage Improvements – CQA, 2017: CQA for the State-Revolving Funds (SRF) drainage improvements project involving proposed drop inlets, storm pipe, and a retention pond in order to reduce nutrient loading. Assisted with overall coordination and

review of shop drawings, American Iron and Steel (AIS) requirements, Davis-Bacon requirements, and assisting the City and Engineer of Record with reviews.

BSE Construction Group Site Design, 2017: Designed grading and site plan for individual homes. Work included analyzing FEMA map and local requirements.

Visaginas Nuclear Power Plant Geotechnical and Hydrogeological Field Investigation – Visaginas, Lithuania, 2012: Quality Control Engineer and site Health & Safety Representative for the 13-week geological drilling field assignment at Visaginas Nuclear Power Plant for siting study of a new plant. Responsible for running QC on all project documents including calibration certificates, geological boring logs, and geotechnical engineering field data.

2010 CIP Update and Solid Waste Management Plan, Brevard County, Florida: Assisted with the cost data base update and cost analyses for development of a five-year and long-term Capital Improvement Programs (CIPs) which were used as a basis for solid waste management system planning for a 25-year period.

Cell 10 Operations Permit Intermediate Modification, Orange County, Florida, 2009: Assisted in the preparation of Application for intermediate modification of operations permit for integration of 54-acre landfill area into existing operations permit and the addition of a landfill gas utilization system and pipeline. Project work included preparation of 2010 FDEP 62-701 forms and supporting documentation.